

Date: Monday, 1/16/2006 4:11:20 PM
 User: Kim Johnston

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	COLLECTIVE LOCK
Job Number :	25501		
Estimate Number :	11948		
P.O. Number :	N/A	Part Number :	D3372041
This Issue :	1/16/2006	S.O. No. :	N/A
Prsht Rev. :	NC	Drawing Number :	D3372 REV B
First Issue :	N/A	Project Number :	N/A
Previous Run :	N/A	Drawing Revision :	B
	Type :	Material :	N/A
	SMALL /MED FAB	Due Date :	1/20/2006
Written By :	SEE COMMENT BELOW	Qty:	4 Um: Each
Checked & Approved By :	SEE COMMENT BELOW		
Comment :	Est Rev:A Removed from 9 Digit 06-01-13 JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D27287	Decal
-----	--------	-------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2728-7 Decal B 22554

2.0	D33721	Main Body
-----	--------	-----------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3372-1 Main Body B 22228

3.0	D33725	Cam Lock Shaft
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3372-5 Cam Lock Shaft B 22290

4.0	D33727	Slider Body
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

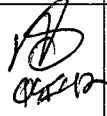
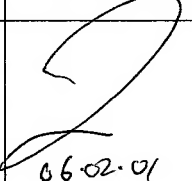

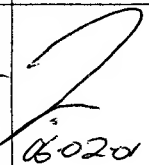
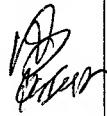


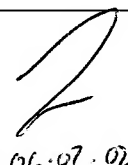
Pick:

Qty Part Number Description Batch

1 D3372-7 Slider Body B 22291

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3372-041 PAR #: N/A Fault Category: Prod / FMS AS Lag NCR: Yes No DQA: Yes Date: 06/02/02
 QA: N/C Closed: Yes Date: 06/02/02

NCR: <u>25501</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06/02/01	16	2 Lock were perap after welding		Scrap + destroy replace replace	SB 06/02/01	 06-02-01		 06-02-01
06/02/01	16	D3372-041 1 part had the wrong keys. Keys were identify wrong + 2 D3372-1 was burned by the welding /		Scrap + destroy replace	SB 06/02/02	 06-02-02		 06-02-02

NOTE: Date & initial all entries

Date: Monday, 1/16/2006 4:11:20 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: COLLECTIVE LOCK

Job Number: 25501

Part Number: D3372041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

D33731KA

Inventory



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3373-1 Cam Lock ~~B22157~~ B23643

6.0

AN542A

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 AN5-42A Bolt M16762

7.0

516WC

SS Flat Washer 5/16



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 5/16WC SS Flat Washer M19611

A/RN/ALocktite 262 M16507

8.0

D33841

Cyclic Sock



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3384-1 Cyclic Sock B22346

9.0

CBL460

Loop Sleeve



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 CBL-460 Loop Sleeve B19474

10.0

CBL1240

Cable



Comment: Qty.: 0.6999 f(s)/Unit Total : 3.4997 f(s)

Pick:

Qty Part Number Description Batch

8" CBL-1240 Cable M16713

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 1/16/2006 4:11:21 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: COLLECTIVE LOCK

Job Number: 25501

Part Number: D3372041

Job Number:



Seq. #:

Machine Or Operation:

Description :

11.0

AN960416

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 AN960-416 Washer M5519

12.0

HX81

1/4"-20 SHCS 3/8" long



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 HX-81 1/4"-20 SHCS 3/8" long M16971

13.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Fabricate D3372-3 using AN5-42A bolt as per Dwg D3372

Identify as D3372-3

FF 06-02-01

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SB 06/02/01

15.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Open Cam Lock package. Keep keys, lock body, lock body nut, flat cam and lock barrel. Discard the rest.

2-Fabricate D3369-5 spacer using the flat cam as per Dwg D3369-5

SB 06/02/01

16.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Tack weld lock shaft as per Dwg D3372

Qty Part Number Description Batch

A/R/N/A

SS Rod

M19555

PD 06-02-01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 1/16/2006 4:11:21 PM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: COLLECTIVE LOCK

Job Number: 25501

Part Number: D3372041

Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Assemble D3372-053 as per Dwg D3372. Apply a drop of permanent locktite 262 to the threads

Qty Part Number Description Batch

A/R N/A Locktite 262 ML6507

Identify as D3372-053

2-Assemble D3372-051 as per Dwg D3372. Identify as D3372-051 and attach keys. Ensure that assembly locks and unlocks smoothly.

3-Assemble lanyard to cyclic sock as per Dwg D3384

4-Assemble D3384-043 to D3372-051 using 1/4"-20 socket head cap screw and washers as per Dwg D3371.

SB 06/02/01

18.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

06.02.01

4

19.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

Record Key #

~~C413A~~ C420A
~~C413A~~ C420A
~~C413A~~ C420A
~~C413A~~ C420A

C206/02/01

4

20.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

545 06/02/02

(4)

SP

06/02/02

(4)

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

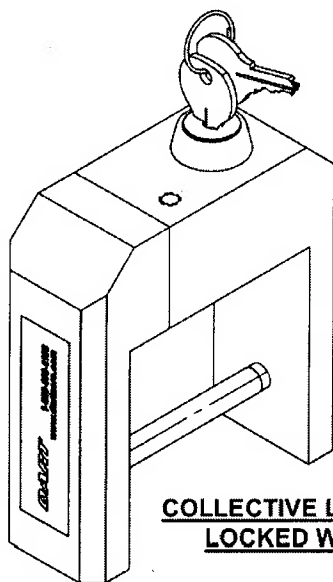
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

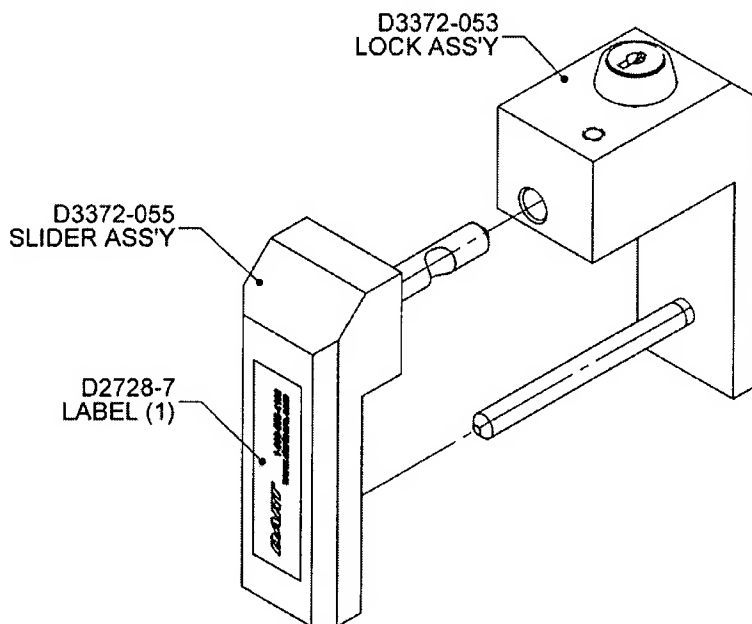
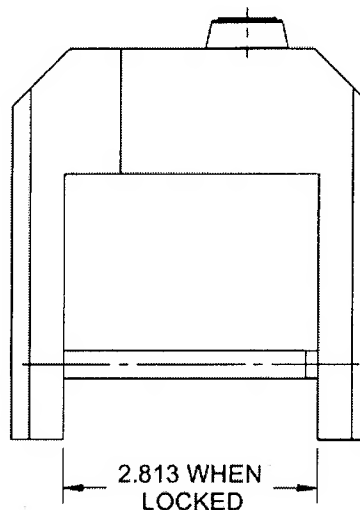
NOTE: Date & initial all entries



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DATE 05.02.23		TITLE COLLECTIVE LOCK	SCALE 1:2
A	05.01.10	NEW ISSUE	
B	05.02.23	REDESIGN FOR STANDARD 1/4 TURN LOCK, D3369-5 SUPERCEDES D3372-11 (OBSOLETE)	



**COLLECTIVE LOCK SHOWN
LOCKED WITH KEYS**



D3372-051 AS350 COLLECTIVE LOCK ASS'Y

NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES

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05/04/28

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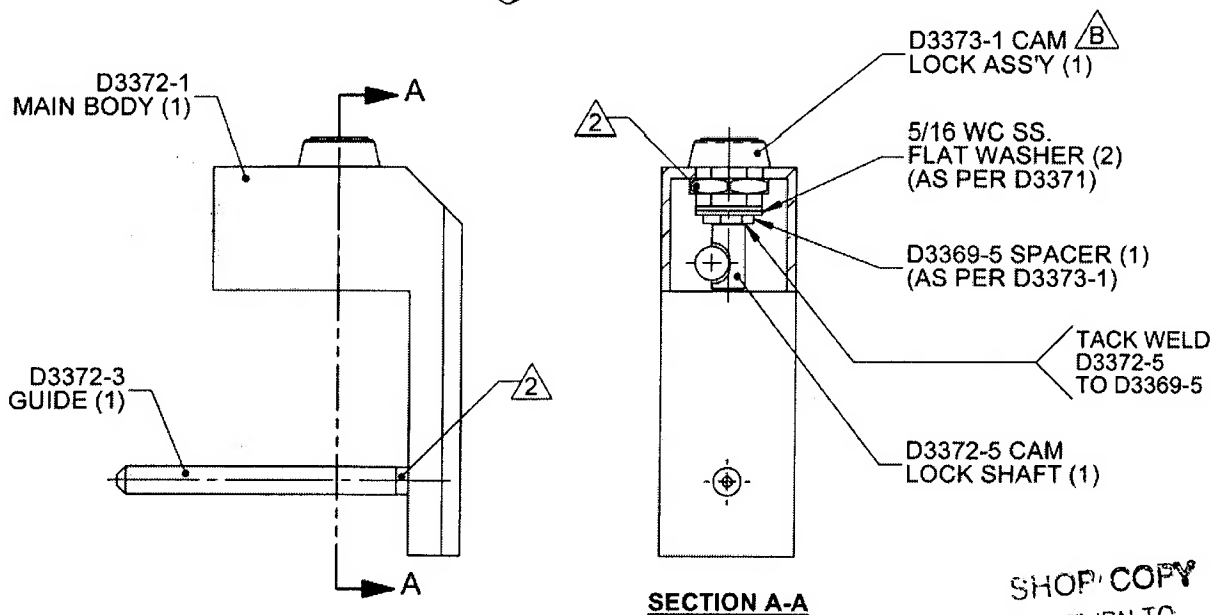
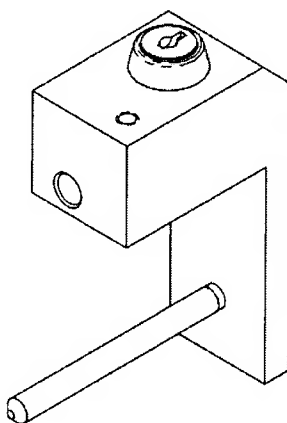
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DATE 05.02.23		TITLE COLLECTIVE LOCK	SCALE 1:2

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D3372-053 LOCK ASS'Y

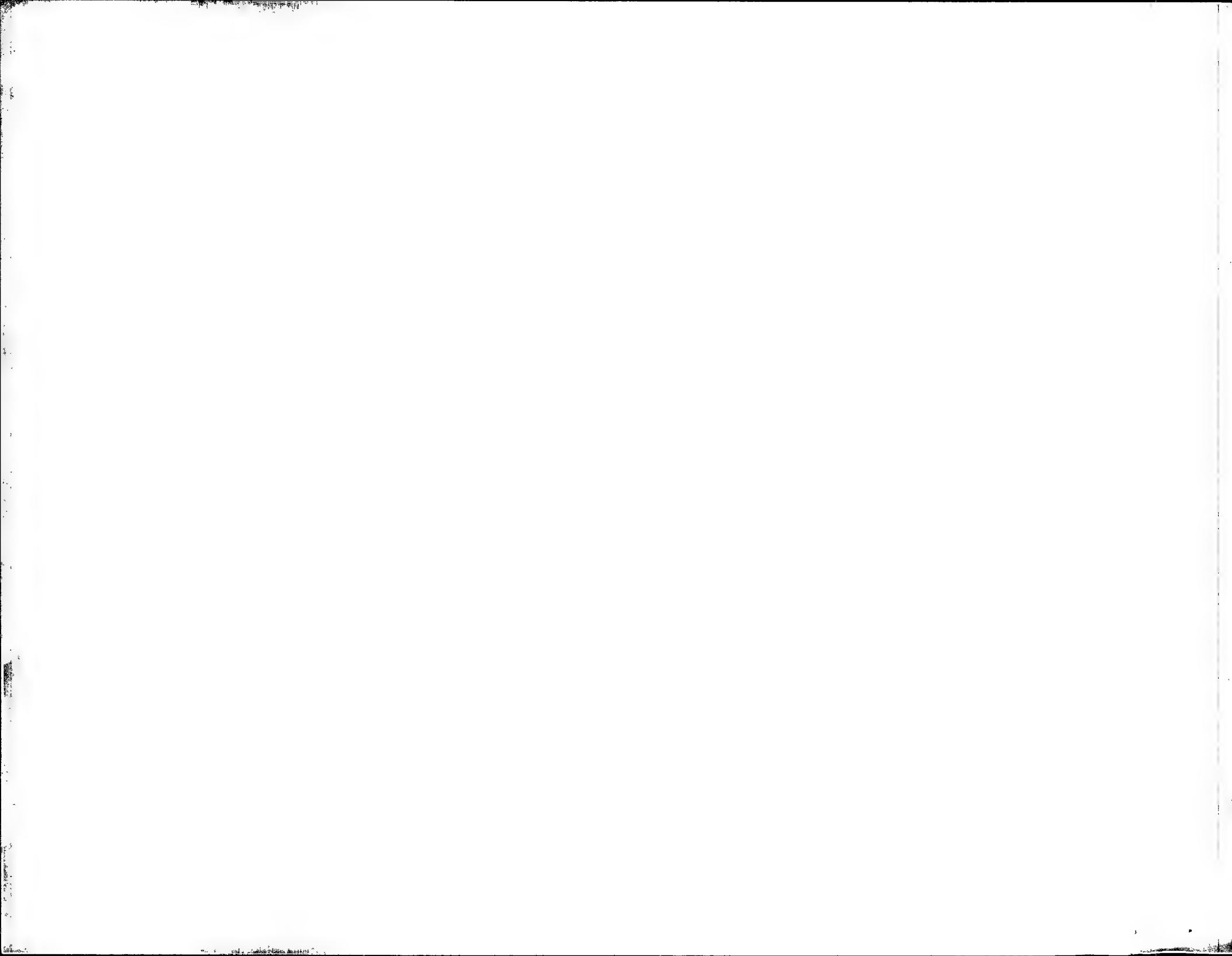
NOTES:

- 1) WELD PER DART QSI 004
- 2) APPLY THREADLOCKER LOCTITE 262 ON THREADS

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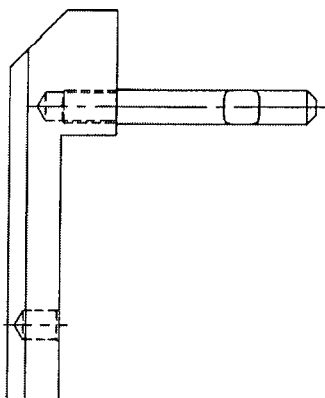
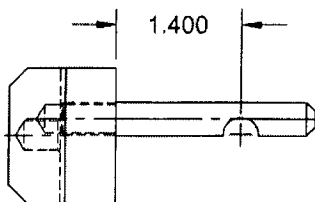
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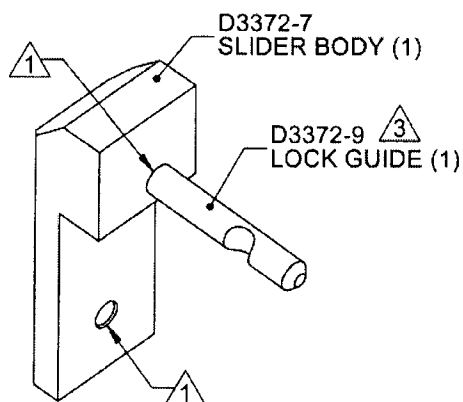


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DATE 05.02.23		TITLE COLLECTIVE LOCK	SCALE 1:2

**RELEASED**

05/04/23

**D3372-055 SLIDER ASS'Y****NOTES:**

- 1) COVER INSIDE HOLES AND D3372-9 PRIOR PAINTING
- 2) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 3) APPLY THREADLOCKER LOCTITE 262 ON D3372-9 THREADS PRIOR ASSEMBLY
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

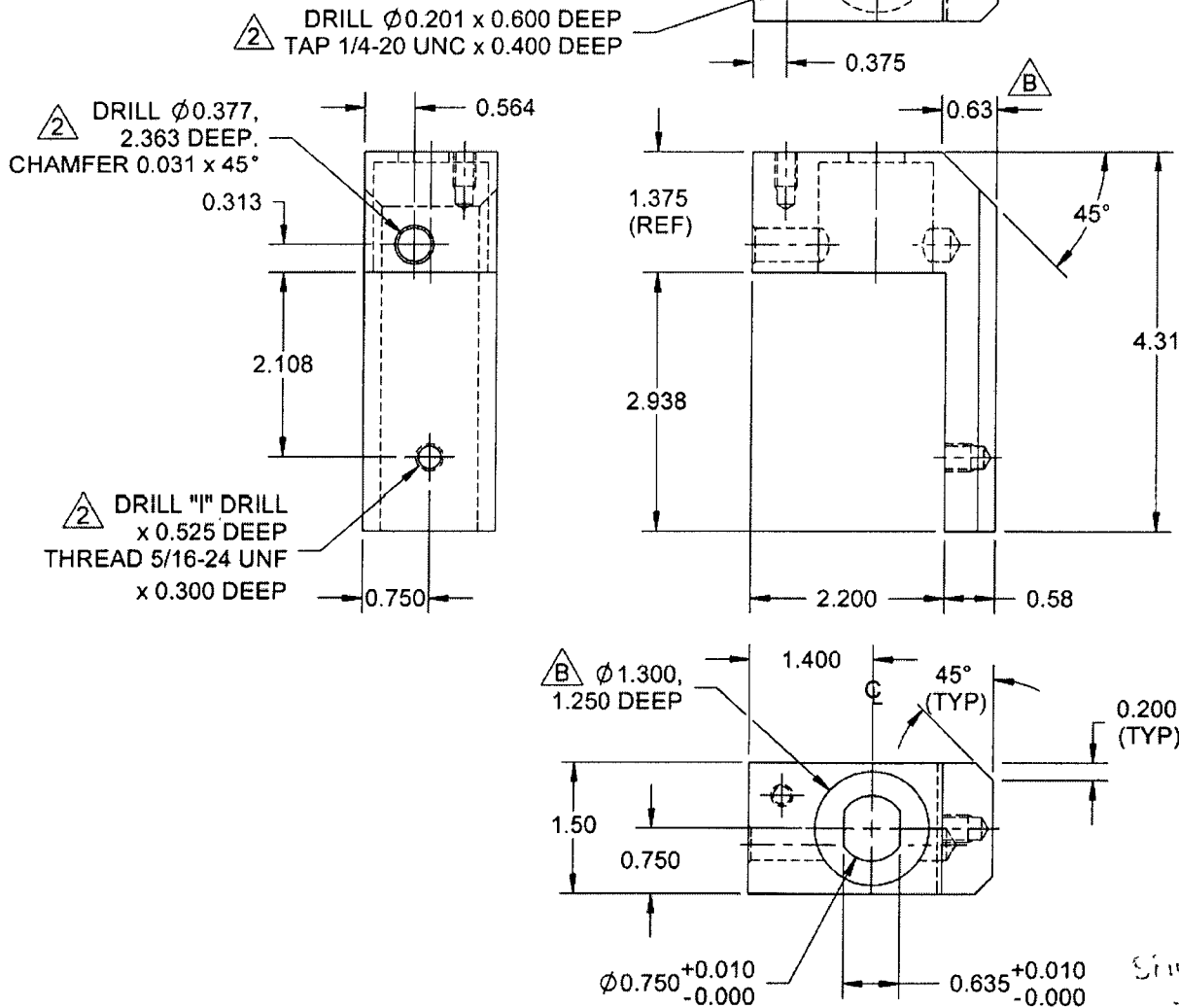
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DATE 05.02.23		TITLE COLLECTIVE LOCK	SCALE 1:2

RELEASED
05/04/23**D3372-1 MAIN BODY****NOTES:**

- 1) MATERIAL: 6061-T6/T651 (QQ-A-200/8 OR QQ-A-225/8)
(REF. DART SPEC. M6061T6B)
- 2) COVER INSIDE HOLES PRIOR PAINTING
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010

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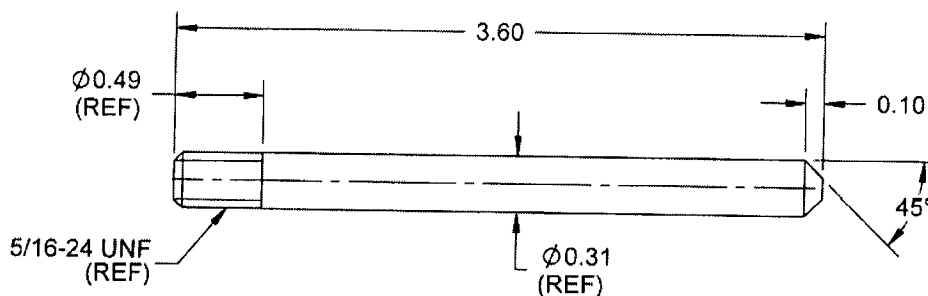
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DATE 05.02.23		TITLE COLLECTIVE LOCK	SCALE 1:1

SPECIFICATION CONTROL DRAWING

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[Signature]
05/04/23



D3372-3 GUIDE

NOTES:

- 1) MATERIAL: AN5-42A BOLT MODIFIED AS SHOWN.
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

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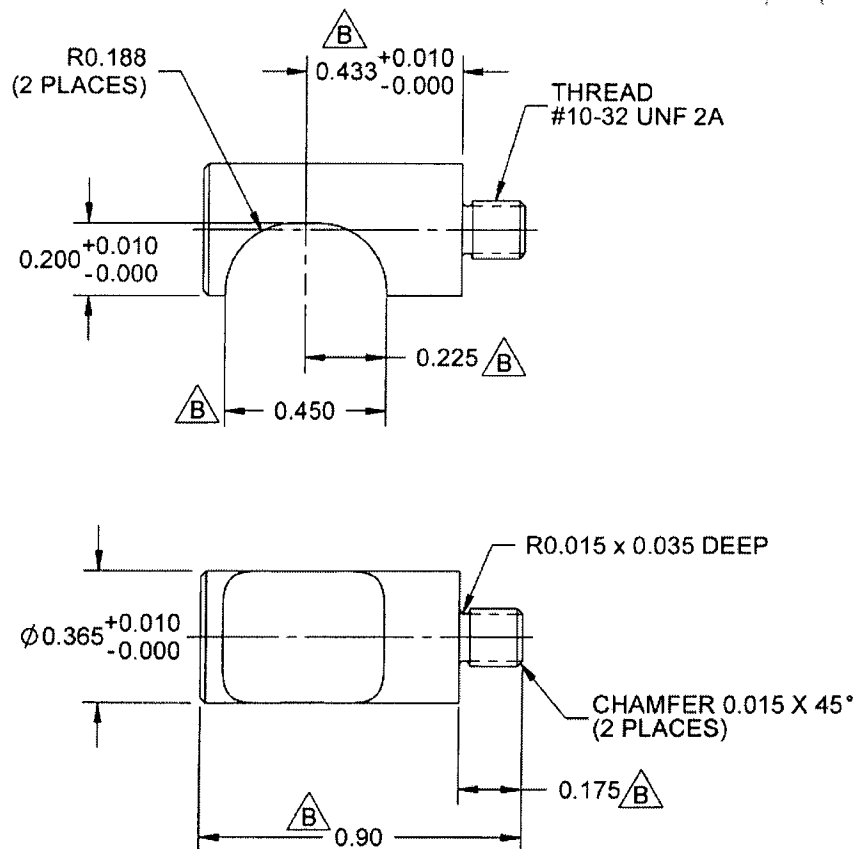
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DATE 05.02.23		TITLE COLLECTIVE LOCK	SCALE 2:1

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05/04/28



D3372-5 CAM LOCK SHAFT

NOTES:

- 1) MATERIAL: AISI 303 S.S. (REF. DART SPEC. M303R0.375)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

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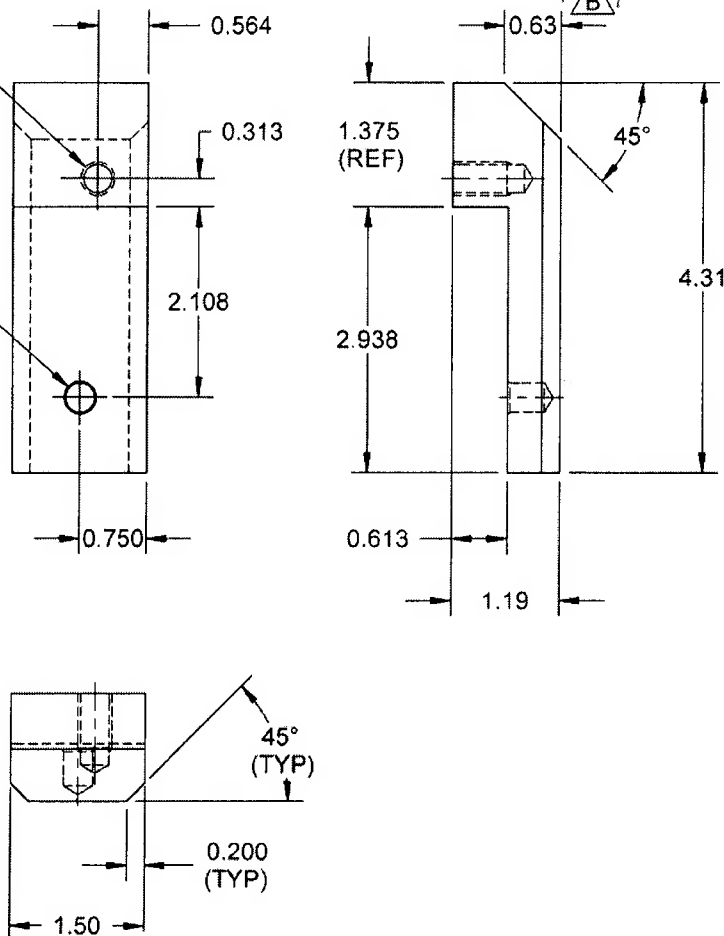
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DATE 05.02.23		TITLE COLLECTIVE LOCK	SCALE 1:2

DRILL $\phi 0.332$
("Q" DRILL) x 0.881 DEEP,
THREAD 3/8-24 UNF x 0.600 DEEP

DRILL $\phi 0.323$
("P" DRILL) x 0.500 DEEP
CHAMFER 0.030 x 30°



D3372-7 SLIDER BODY

NOTES:

- 1) MATERIAL: 6061-T6/T651 (QQ-A-200/8 OR QQ-A-225/8)
(REF. DART SPEC. M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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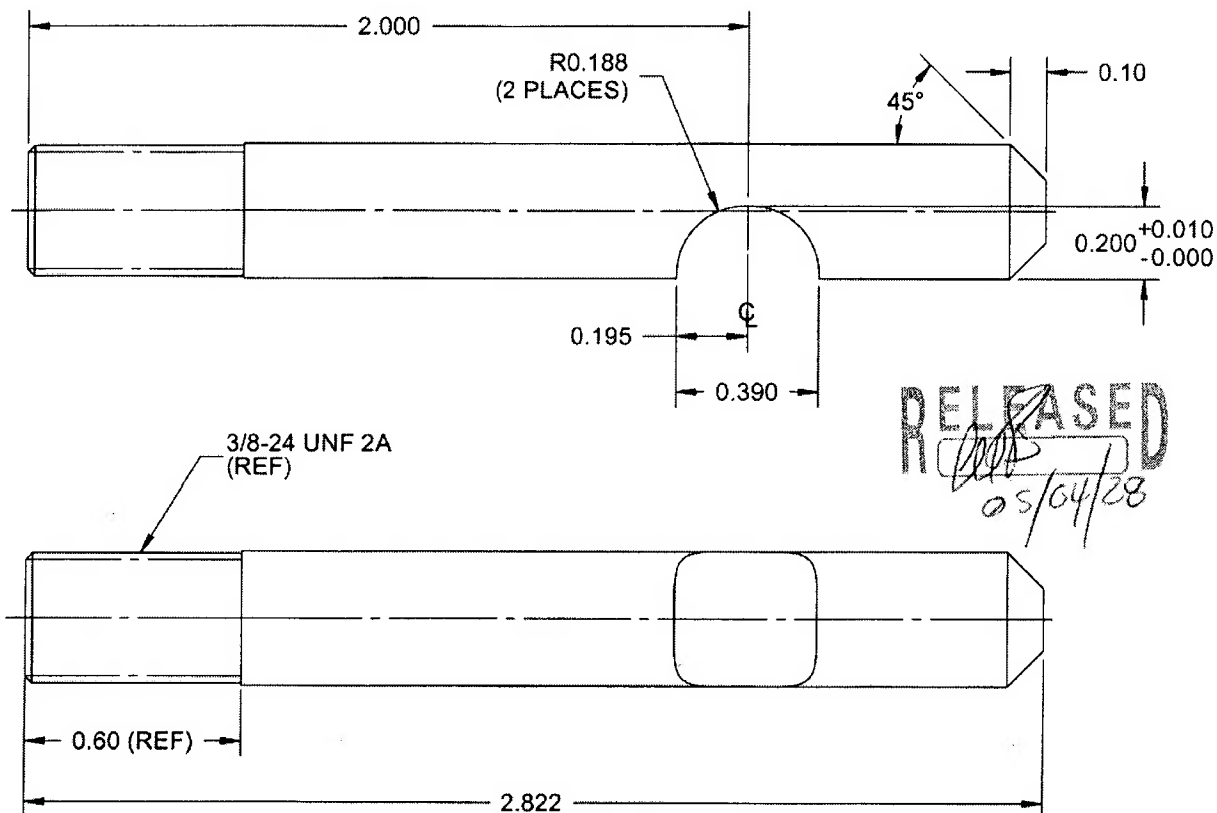
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DATE 05.02.23		TITLE COLLECTIVE LOCK	SCALE 2:1

SPECIFICATION CONTROL DRAWING



D3372-9 LOCK GUIDE

NOTES:

- 1) MATERIAL: AN6-36A BOLT, MODIFIED AS SHOWN
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

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